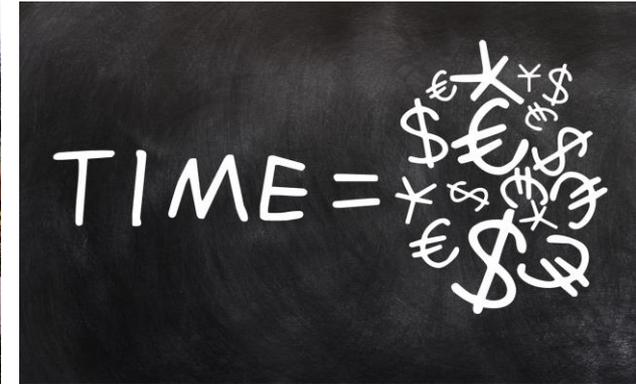


Exceptional service in the national interest



Understanding Complexities in Emergency Management in Order to Mitigate Cascading Consequences

Carl J. Unis, ME

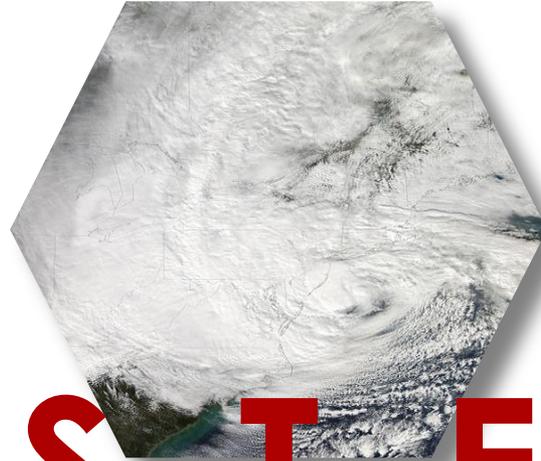


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HURRICANE SANDY

DISASTERS



ARIZONA WILDFIRES

MIDWEST FLOODING

OKLAHOMA TORNADOS

ATLANTA SNOWSTORM

Concept

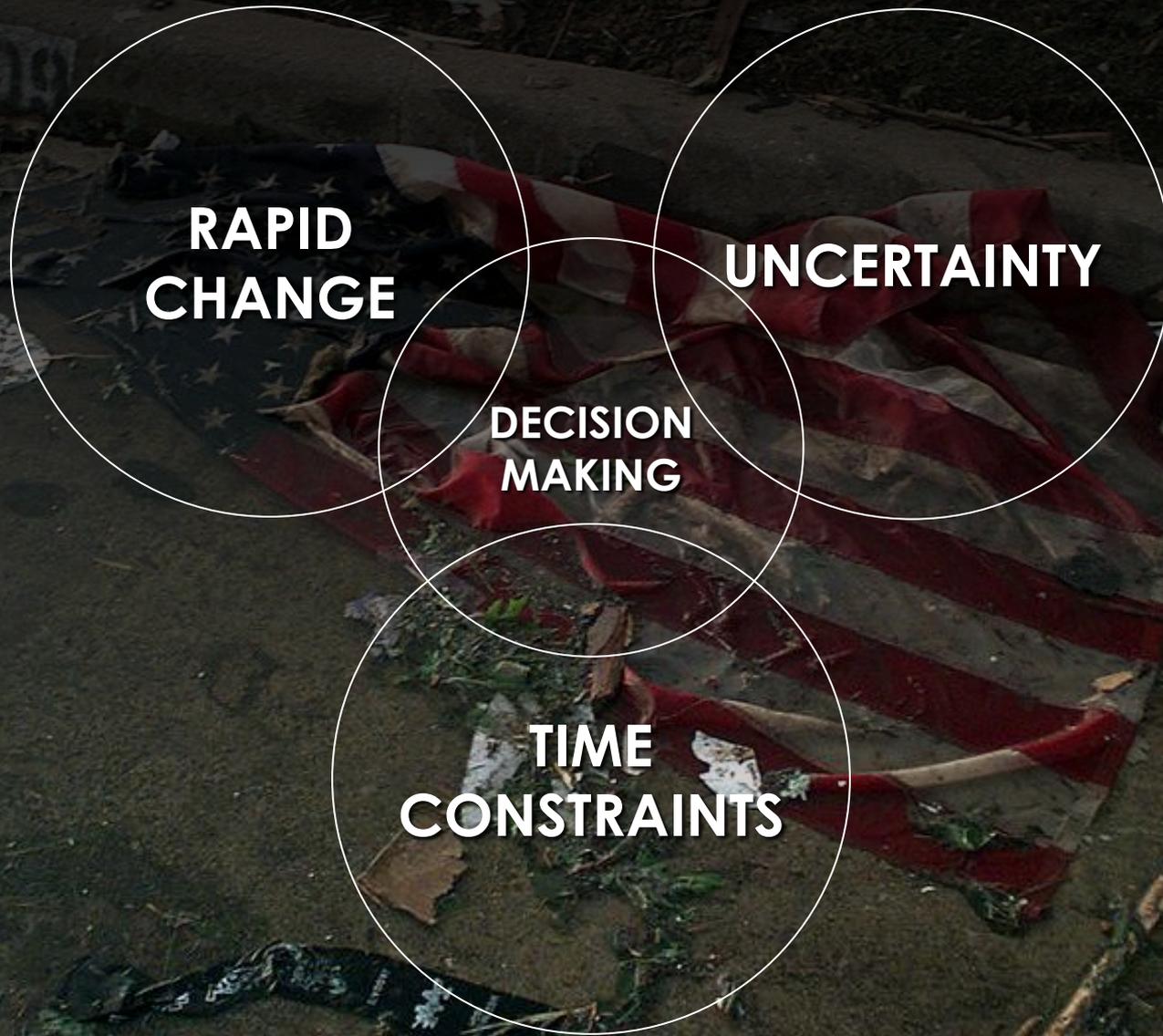


Concept

complexities



Challenges



C O M P L E X s y s t e m

Time-constrained events effect on ...

Water

Electric
Power

Fuels

**Lifeline
Infrastructures**

Hospitals

Transportation

Improving the Emergency Management Software Tools



**Response time faster
with less cost**

Proposal...

Bring

Software Developers, Analysts & Emergency Management Personnel

TOGETHER

for collaboration on needs for
improvement.

Collaboration Topics

- Emergency Response Events
- Logistics
- Information Assurance
- Concerns of operations personnel
- Decisive and informed decision making
- Time constrained decision making

Summary

- S/W developers, analysts and emergency management personnel work together to find solutions than problems
- Include emergency responder's expertise/experience to provide a better picture of the problem/set of problems



The complexities of Emergency response events can be improved ...

“When we collaboratively apply systems engineering into emergency management.”